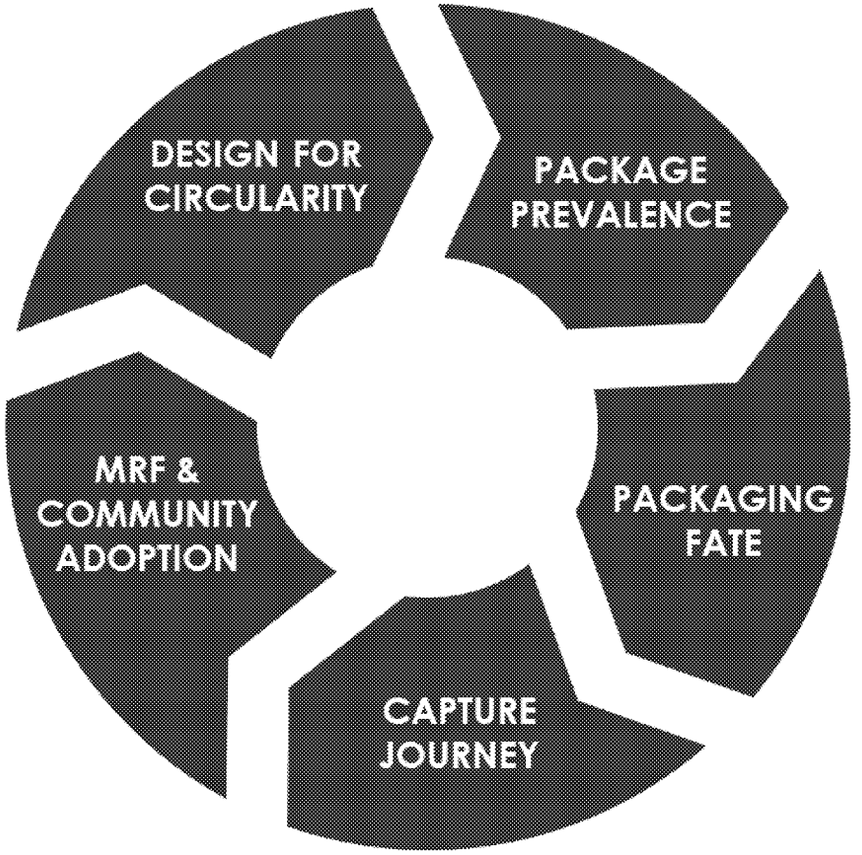
PATHWAY to CIRCULARITY

AN INITIATIVE OF THE RECYCLING PARTNERSHIP



Contents

- What is the Pathway to Circularity?
  - ✓ *Pathway Framework*
  - ✓ *Material Coalition Examples*
- Strategic Assessment to Circularity
- Circularity Council

What is The Pathway To Circularity?

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THE RECYCLING PARTNERSHIP'S PATHWAY TO CIRCULARITY

The **Pathway to Circularity will:**

- be an action-oriented, solutions-based initiative
- outlining, addressing & successfully navigating current & future packaging recycling system challenges.

ASTRX
Applying Systems Thinking to Recycling

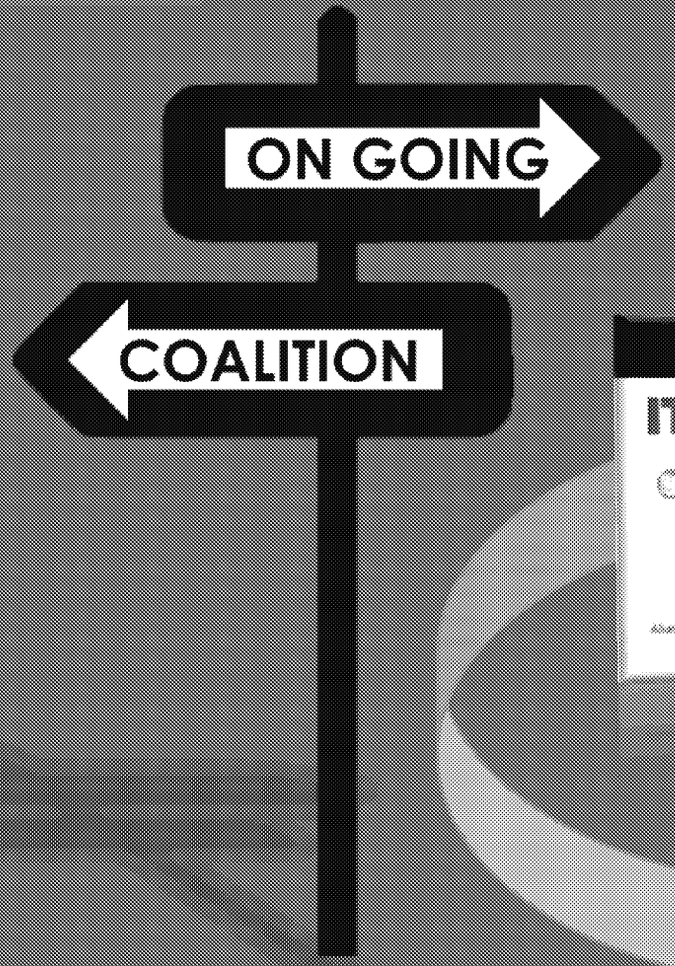
FOUNDATION: ASTRX NAVIGATING THE RECYCLING SYSTEM

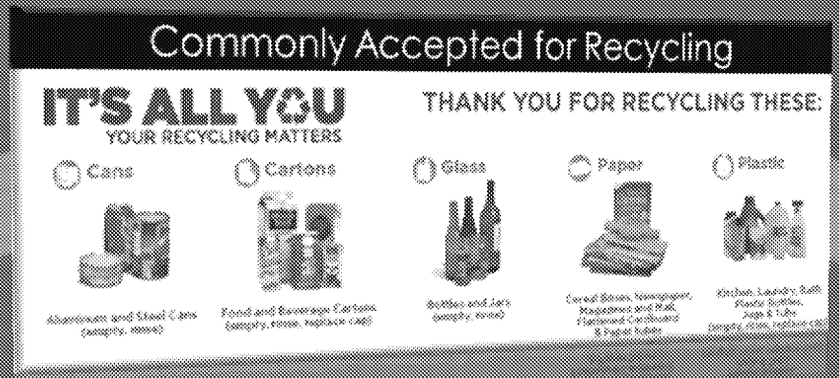
"COMMONLY ACCEPTED" FOR RECYCLING

... is a moment in time

The **Pathway to Circularity** is a living and changing roadmap.

Attaining '**Commonly Accepted for Recycling**' is not an end point, but a milestone that needs continuous evaluation & at times additional work to ensure sustaining practices.





Creating and Maintaining End Markets

Use of PCR in new and existing packaging and products

Pathway Framework

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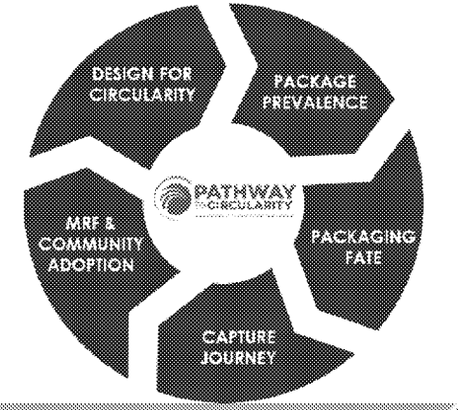

Pathway to Circularity Building Blocks

PACKAGING FATE

- ✓ Municipal Collection/Access
- ✓ Fits in common MRF Bale Category
- ✓ Market demand for post-consumer material

CAPTURE JOURNEY

- ✓ Size
- ✓ 2D or 3D Sortation
- ✓ Material Specific Capture Criteria

DESIGN FOR CIRCULARITY

- ✓ Design Guides
- ✓ End Market Support

PACKAGE PREVALENCE

- ✓ Critical Mass
- ✓ Look-a-Like Concerns

MRF & COMMUNITY ADOPTION

- ✓ Recycling Facilities (MRFs)
- ✓ Communities
- ✓ Consumers

If all building blocks requirements are not met, the material is not circular; there is an opportunity to form a coalition

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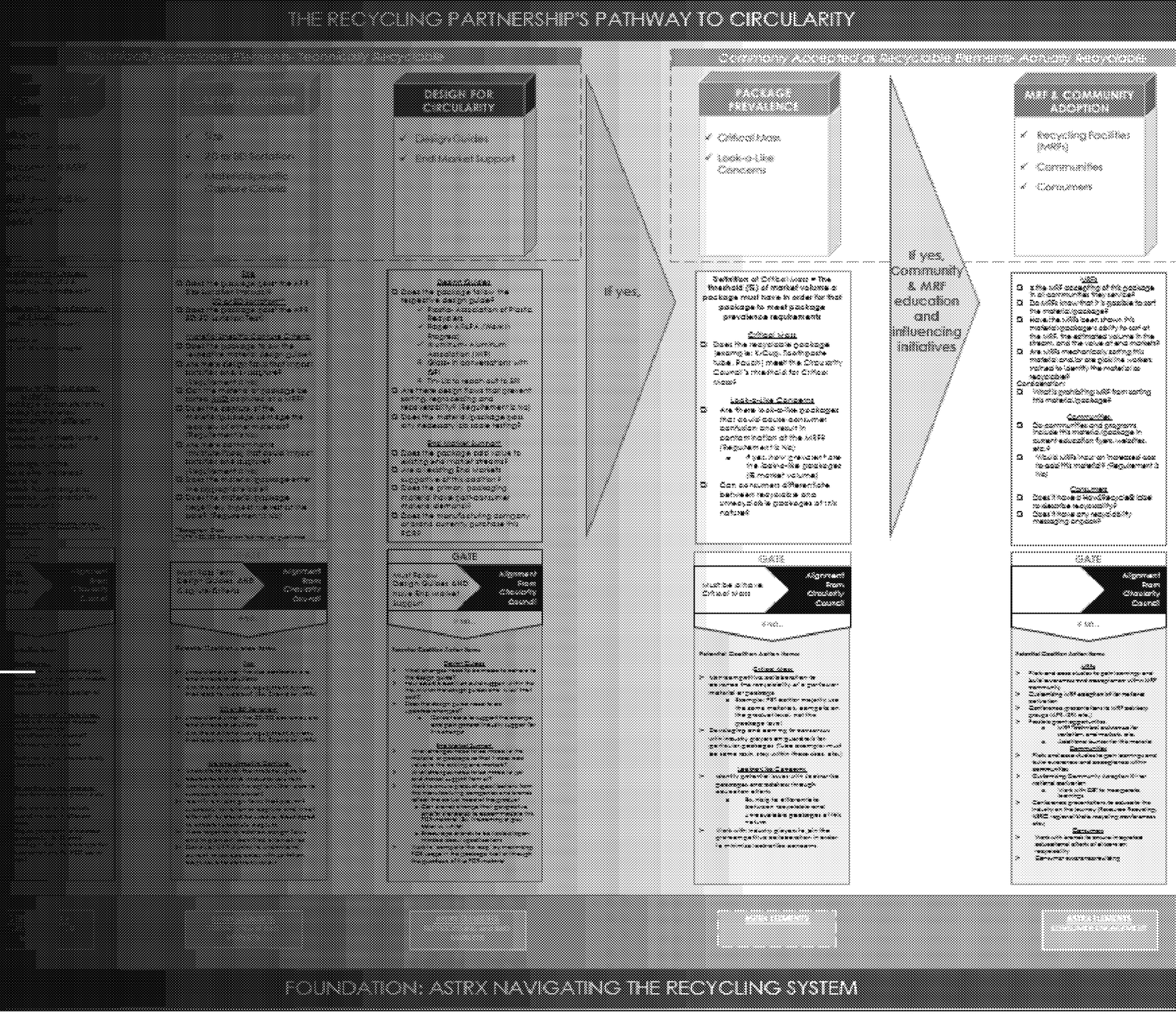
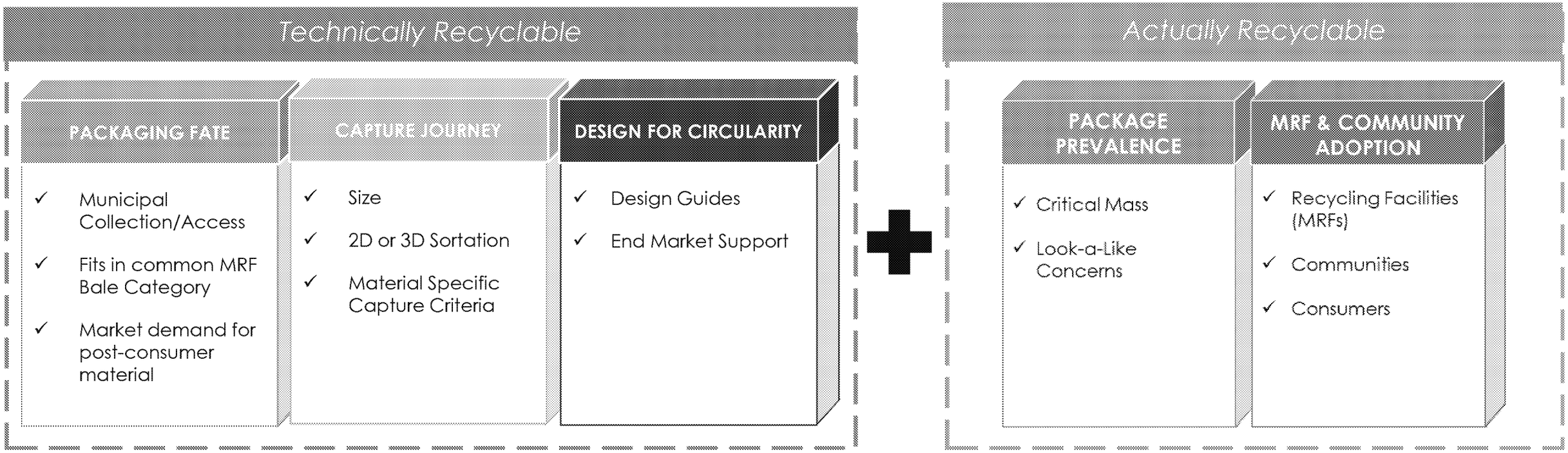
Pathway to Circularity: Strategic Assessment



Strategic Assessment to Circularity



Of note: Some of the materials we've found helpful to test the Pathway to Circularity are:

- Tubes
- Cartons
- EPP and EPE
- Black Plastic
- Pouches
- Paper cups
- Polypropylene
- Films

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PACKAGING FATE

KEY QUESTIONS	**1. Does the package have a successful circular packaging fate?** **2. Is there adequate recycling system demand/pull?**
KEY ELEMENTS	1. Municipal Collection/Access 2. Fits in Common MRF Bale Category 3. Market Demand for Post-Consumer Recycled Material (PCR)

CAPTURE JOURNEY

KEY QUESTIONS	**1. Does it successfully sort at the MRF at the XX% MRF capture rate threshold?**
KEY ELEMENTS	1. Size 2. 2D or 3D Sortation 3. Material Specific Capture Criteria

DESIGN FOR CIRCULARITY

KEY QUESTIONS	**1. Is the package designed to bring value to end markets?**
KEY ELEMENTS	1. Design Guides 2. End Market Support

PACKAGE PREVALENCE

KEY QUESTIONS	**1. Is the recyclable package a commonly used package in the industry?** **2. Does the package design have CRITICAL MASS (XX% threshold)?**
KEY ELEMENTS	1. Critical Mass 2. Look-a-Like Concerns

MRF & COMMUNITY ADOPTION

KEY QUESTIONS	**1. Does the majority of MRF processing volume accept this package as recyclable?** **2. Do communities and municipal recycling programs include this material/package in current education flyers, websites, etc.?**
KEY ELEMENTS	1. Recycling Facilities (MRFs) 2. Communities 3. Consumers

Pathway to Circularity
Material Coalitions

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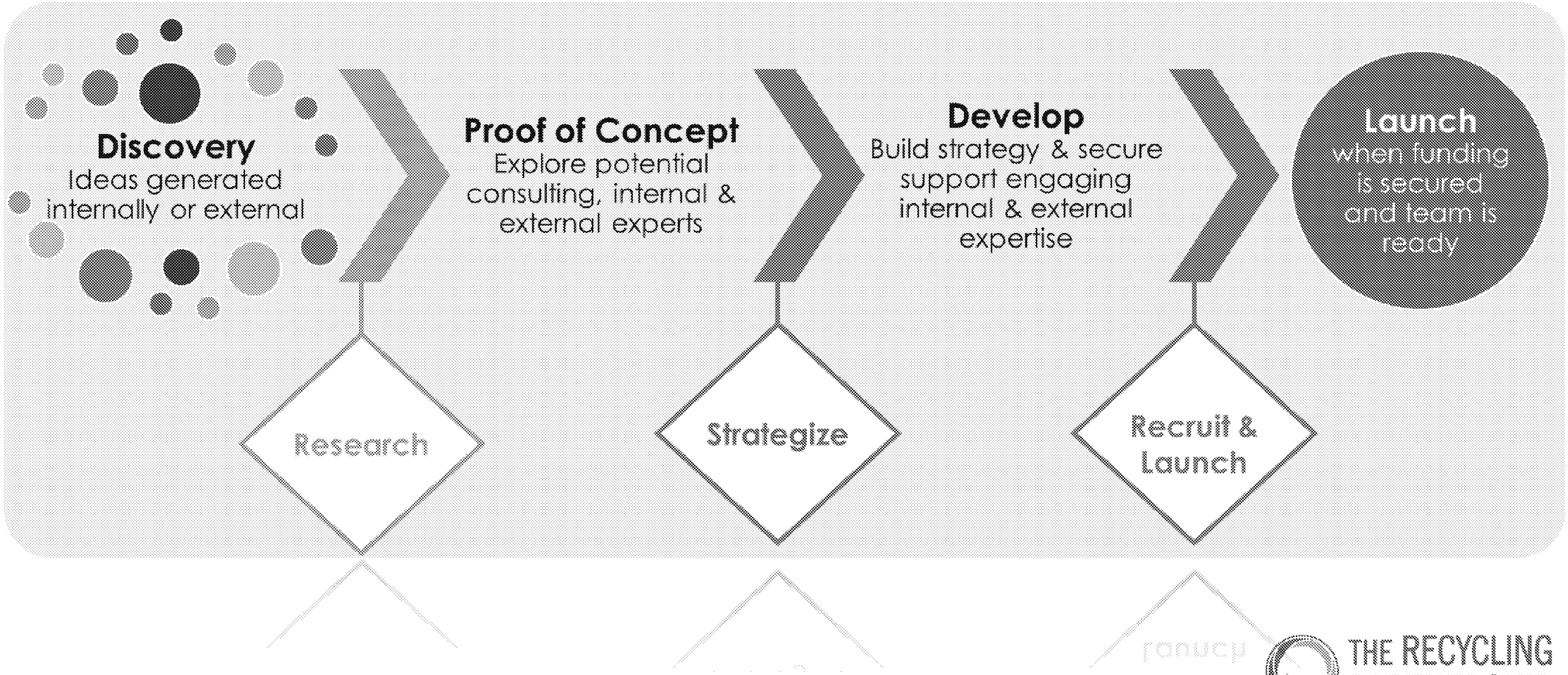
When and How does a Coalition Form?



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PATHWAY to CIRCULARITY

POLYPROPYLENE RECYCLING COALITION

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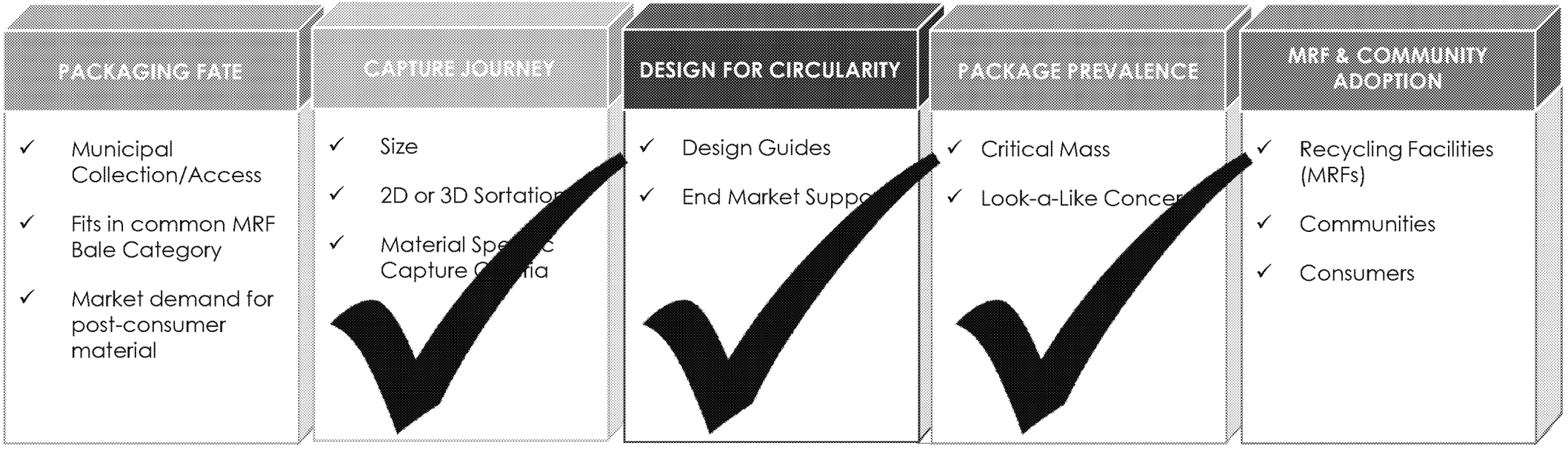
Polypropylene is a material of value & enjoys successful recycling in some communities/MRFs. This Coalition will focus on increasing curbside access for PP, assisting MRFs with sorting PP & maintaining vibrant, robust end markets



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FILM & FLEXIBLE COALITION

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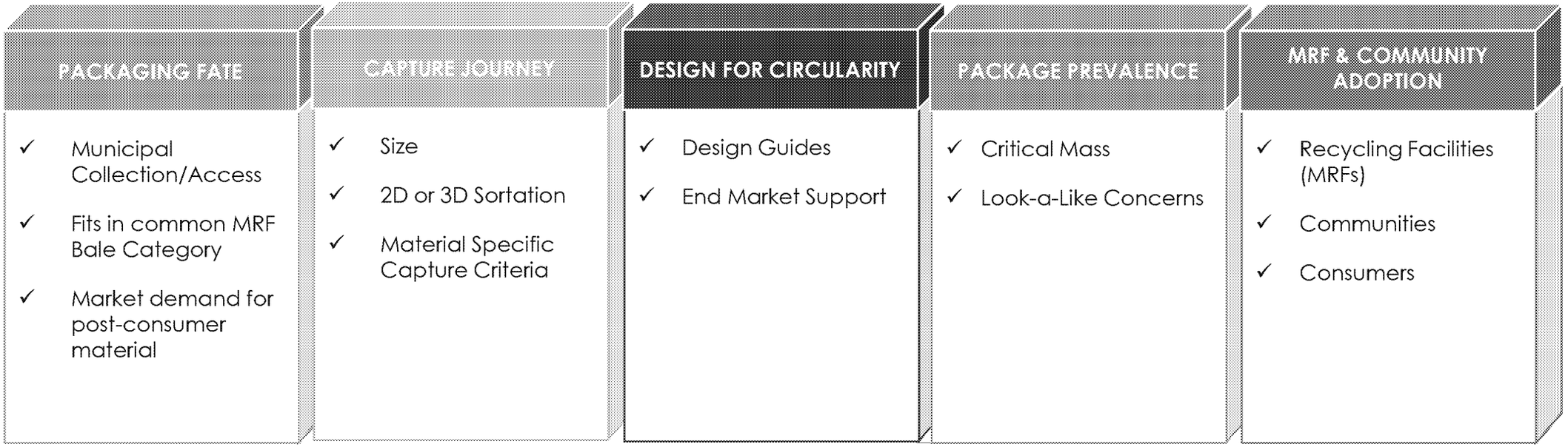
Films & Flexibles face a variety of recycling challenges. This Coalition will focus to increase recovery & utilization plastic film & flexible packaging materials for recycling and will involve every part of the Pathway to Circularity.



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Pathway to Circularity Industry Council

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Circularity Council: Who, What, and Why

WHO
36 industry stakeholders, representing all material types and as many industry organizations

WHAT
Addressing principals, overarching ideas & grey areas/concepts within the Pathway.
Defining industry thresholds needed to successfully navigate recyclability & circularity of packaging materials today.

WHY
The Pathway addresses limitations associated with recyclability & circularity of packaging materials & may involve effecting system change and hence industry alignment & consensus.

The Circularity Council objective is to form a cohesive network to enable industry alignment and catalyze change.

Possible Circularity Council Decisions

- ✓ Align on & define key industry thresholds
  - MRF Capture Rate Threshold
  - Critical Mass Threshold

  (EX.: 75% (Critical Mass), 90% (MRF Capture)
- ✓ Alignment & support for current design guides & testing protocols

  (Ex. APR Design Guide or 2D/3D Sorting Protocol)
- ✓ Recyclability labeling as a requirement

Cadence

- Quarterly Meetings (TBC)
- First Meeting June 2020

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Pathway to Circularity Industry Council

ORGANIZTIONS
- CLP
- EPA
- ISRI
- SPC

GLASS
- Glass Recycling Coalition
- Owens-Illinois

METAL
- Tri-Arrows Aluminum
- Aluminum Association
- Silgan Containers

BRANDS
- Colgate
- J&J
- PepsiCo
- Starbucks

MRFs
- Balcones
- Casella
- Eureka
- Recology
- Republic
- Rumpke
- Sims
- Waste Management

CITY & STATE
- City of Phoenix
- NERC
- South Carolina

PLASTIC
- ACC
- APR
- Indorama
- KW Plastics

PAPER
- AF&PA
- Carton Council
- International Paper
- Pratt
- Recycled Paperboard Alliance

RETAILERS
- Amazon
- Target
- Walmart

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Questions & Discussion

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